Claims

1. A method for implementing AAL2 for variable bite rate real-time service, comprising: first, setting sending buffers for storing packets to be sent and receiving buffers for storing packets to be received;

At the connected switching node, storing the CPS packets processed on CPS layer in the receiving buffers of the VC (Virtual Connection); then, searching for the VPI (Virtual Path Identifier), VCI (Virtual Channel Identifier) and CID of the corresponding sending VC according to the VPI of said VC, the VCI of the virtual path and CID of the packet, and then switching the CPS packets to the sending buffers of the VC, to which said CPS packets are sent; at the connected terminating node,

For voice packets, in the receiving direction, removing the heads of CPS packets processed on CPS layer, and storing the resulting payload in the receiving buffers of the VC; next, submitting the data in said buffers to the application layer; in the sending direction, the application layer transferring the data to be sent to the adaptation layer, which stores the data in the sending buffers;

For data packets, in the receiving direction, allocating buffers for SSSAR processing for the connection corresponding to each CID value; storing the CPS packets processed on CPS layer in the receiving buffers of the VC, then performing reassembly on SSSAR layer, and storing the reassembled data packets in said buffers corresponding to each CID value for SSSAR processing, and then submitting the data related with the VC to the application layer; in the sending direction, the application

- 12 -

layer transferring the data to be sent to the adaptation layer, which segments said data according to SSSAR protocol into CPS packets and storing them in the sending buffers of the corresponding VC.

2. A method for implementing AAL2 for variable bite rate real-time service according to claim 1, wherein setting pointers pointing to the buffers and storing them in the buffer queues, and each VC has its own sending buffer queue and receiving buffer queue.

3. A method for implementing AAL2 for variable bite rate real-time service according to claim 2, wherein during the AAL2 data exchange for variable bit rate real-time service, the operation of switching CPS packets from the receiving buffers to the sending buffers comprises: modifying the CID of the CPS packets to the sending CID searched, and then exchanging the pointer to the buffer storing the received CPS packets with the corresponding one of an empty buffer of the sending VC.

4. A method for implementing AAL2 for variable bite rate real-time service according to claim 2, wherein for voice packets at the terminating nodes, in the receiving direction, the submission of data in the buffers to the application layer is performed through submitting the pointer to the receiving buffer, VPI and VCI of the VC, and CID of the CPS packets to the application layer and returning the pointer to an empty buffer from the application layer to the adaptation layer and storing in the receiving buffer queues; in the sending direction, the operation in which the data is transferred from the application layer to the adaptation layer and then stored in the sending buffers is performed through transferring the

pointer to the sending buffer which stores the data to be sent and the corresponding VPI, VCI and CID thereof to the adaptation layer, and the adaptation layer storing said pointer in the buffer queues to replace an empty buffer in the receiving buffer
5   queues and returning the pointer to the empty buffer to the application layer.

   5. A method for implementing AAL2 for variable bite rate real-time service according to claim 2, wherein for data packets at the terminating nodes, in the receiving direction, the
10   operation of submitting data from a SSSAR buffers to the application layer is performed through submitting the VPI and VCI of the VC, the pointer to the SSSAR buffer and CID of the CPS packets to the application layer and returning the pointer to an empty buffer from the application layer to the adaptation
15   layer and storing the pointer in the SSSAR buffer queue; in the sending direction, the operation of submitting the data from the application layer to the adaptation layer and storing the data in the sending buffers is performed through transferring the pointer to the buffer storing the data to be sent and the
20   corresponding VPI, VCI and CID to the adaptation layer, which segments the data in the buffer according to SSSAR protocol into CPS packets and storing them in the sending buffer of the VC, and then returning the pointer to the sending buffer to the application layer.
25   6. A method for implementing AAL2 for variable bite rate real-time service according to claim 1 or 2, wherein said buffers are the same in size.